

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/005268

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl.⁷ H04B1/707, 1/10, H04J1/14, H04L27/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.⁷ H04B1/707, 1/10, H04J1/14, H04L27/38

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Jitsuyo Shinan Toroku Koho	1996-2005
Kokai Jitsuyo Shinan Koho	1971-2005	Toroku Jitsuyo Shinan Koho	1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP 2003-87218 A (Matsushita Electric Industrial Co., Ltd.), 20 March, 2003 (20.03.03), Figs. 2, 3, 5 & US 2003/0179776 A1 25 September, 2003 (25.09.03) & EP 1401133 A1 24 March, 2004 (24.03.04) & CN 1465150 A 31 December, 2003 (31.12.03) & JP 2004-357339 A 16 December, 2004 (16.12.04) & WO 2003/003634 A1 09 January, 2003 (09.01.03)	1-3, 5-9 4, 10, 11

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "O" document referring to an oral disclosure, use, exhibition or other means
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"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search
24 May, 2005 (24.05.05)Date of mailing of the international search report
07 June, 2005 (07.06.05)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

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International application No.

PCT/JP2005/005268

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP H11-8604 A (Hitachi Denshi, Ltd.), 12 January, 1999 (12.01.99), Claim 3 & JP 2004-242366 A 26 August, 2004 (26.08.04) & JP 3565537 B2 15 September, 2004 (15.09.04)	1-3, 5-9 4, 10, 11
Y A	JP 2002-94402 A (Hitachi, Ltd.), 29 March, 2002 (29.03.02), Fig. 1 (Family: none)	1-3, 5-9 4, 10, 11
Y A	JP H9-153882 A (Victor Company Of Japan, Ltd.), 10 June, 1997 (10.06.97), Fig. 3 & US 6009073 A 28 December, 1999 (28.12.99) & JP 2001-119364 A 27 April, 2001 (27.04.01) & CN 1158040 A 27 August, 1997 (27.08.97) & EP 765059 B1 04 December, 2002 (04.12.02) & DE 69625150 E 16 January, 2003 (16.01.03) & EP 765059 A2 26 March, 1997 (26.03.97)	1-3, 5-9 4, 10, 11
Y A	JP H6-291553 A (Mitsubishi Electric Corp.), 18 October, 1994 (18.10.94), Fig. 1 (Family: none)	3 1, 2, 4-11
Y A	JP 2000-232325 A (Japan Radio Co., Ltd.), 22 August, 2000 (22.08.00), Fig. 2 (Family: none)	3 1, 2, 4-11
A	JP H3-268616 A (Nippon Telegraph And Telephone Corp.), 29 November, 1991 (29.11.91), Fig. 1 (Family: none)	4
Y A	JP 2002-44064 A (Matsushita Electric Industrial Co., Ltd.), 08 February, 2002 (08.02.02), Claim 4 (Family: none)	6 1-5, 7-11

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP 2003-179530 A (Alps Electric Co., Ltd.), 27 June, 2003 (27.06.03), Fig. 1; Par. No. [0096] & JP 2003-179531 A 27 June, 2003 (27.06.03) & US 2003/0109242 A1 12 June, 2003 (12.06.03) & EP 1318641 A2 11 June, 2003 (11.06.03)	8, 9 1-7, 10, 11
Y A	JP 2001-268145 A (NEC Corp.), 28 September, 2001 (28.09.01), Fig. 1 & GB 2360408 A 19 September, 2001 (19.09.01) & US 2001/0022821 A1 20 September, 2001 (20.09.01) & GB 2360408 B 24 December, 2003 (24.12.03) & JP 3531571 B2 31 May, 2004 (31.05.04)	9 1-8, 10, 11
Y A	JP 2002-44175 A (Japan Radio Co., Ltd.), 08 February, 2002 (08.02.02), Fig. 1 & JP 350817 B2 02 March, 2004 (02.03.04)	9 1-8, 10, 11
A	JP 2001-156726 A (Hitachi Kokusai Electric Inc.), 08 June, 2001 (08.06.01), Fig. 1 (Family: none)	10